

U. S. Serial Number 10/751,451
Response to Office Action dated August 11, 2004
Page 2

Amendments to Abstract

Please add the attached abstract to the application.

Abstract

This invention provides for a protein of the TGF- β superfamily in which the cysteine involved in the normal formation of homodimers is changed to another amino acid. These mutant proteins, as monomers, display higher bone morphogenetic activity than the wild-type protein dimers. Also provided is a method for producing and isolating these monomers by plasmid driven expression in various host systems including *E. coli*. In addition, the invention discloses the use of an agent containing purified monomers in preventing and treating diseases and problems affecting bone and/or cartilage.